



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2017-0241; Directorate Identifier 2017-NE-09-AD]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Technify Motors GmbH Reciprocating Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Technify Motors GmbH TAE 125-02 reciprocating engines. This proposed AD was prompted by a loss of engine power in flight caused by oil leaking from the gearbox radial shaft sealing ring that contaminated the clutch. This proposed AD would require replacement of the clutch with a dual mass flywheel. We are proposing this AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Technify Motors GmbH, Platanenstrasse 14, D-09356 Sankt Egidien, Germany; phone: +49 37204 696 0; fax: +49 37204 696 29125; email: [info@centurion-engines.com](mailto:info@centurion-engines.com). You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0241.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0241; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: [robert.green@faa.gov](mailto:robert.green@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0241; Directorate Identifier 2017-NE-09-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all

comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD.

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2017-0034, dated February 20, 2017 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products.

The MCAI states:

A temporary power loss occurred during flight on a TAE 125-02-powered aeroplane. Following investigation, it was determined that an improper lapping of the gearbox driveshaft led to insufficient sealing of the gearbox radial shaft sealing ring, eventually resulting in oil leakage and oil contamination of the clutch.

This condition, if not detected and corrected, could lead to permanent engine power loss, possibly resulting in reduced control of the aeroplane.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0241.

### **Related Service Information under 1 CFR Part 51**

Technify Motors GmbH has issued Service Bulletin (SB) No. SB TMG 125-1020 P1, Initial Issue, dated January 27, 2016. The SB describes procedures for replacing the clutch with a dual mass flywheel. This service information is reasonably available

because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of Germany, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require replacing the clutch with a dual mass flywheel.

#### **Costs of Compliance**

We estimate that this proposed AD affects 4 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

##### **Estimated Costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Replace clutch and gearbox	0 work-hours x \$85 per hour = \$0	\$5,805	\$5,805	\$24,580

#### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Technify Motors GmbH:** Docket No. FAA-2017-0241; Directorate Identifier 2017-NE-09-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Technify Motors GmbH TAE 125–02–99 (commercial designation CD–135, formerly Centurion 2.0) and TAE 125–02–114 (commercial designation CD–155, formerly Centurion 2.0S) reciprocating engines with a gearbox serial number (S/N) listed in Figure 1 to paragraph (c) of this AD.

**Figure 1 to Paragraph (c) of this AD – Gearbox S/Ns**

00095	00107	00139	00160	00171	00172	00179	00189	00224
00327	00396	00432	00459	00481	00564	00688	00697	00884
00923	00957	01019	01048	01081	01082	01106	01125	01236
01237	01241	01245	01288	01311	01314	01351	01357	01361
01388	01418	01427	01487	01529	01534	01561	01598	01634
01655	01704	01711	01755	01762	01786	01844	01881	01883
01884	01887	01891	01893	01904	01928	01933	01935	01951
01977	01978	01986	02026	02040	02041	02127	02141	02167
02189	02228	02289	02298	02304	02314	02316	02354	02432

**(d) Subject**

Joint Aircraft System Component (JASC) Code 8510, Reciprocating Engine Front Section.

**(e) Reason**

This AD was prompted by a loss of engine power in flight caused by oil leaking from the gearbox radial shaft sealing ring that contaminated the clutch. We are proposing this AD to prevent failure of the clutch, loss of engine power in flight, and reduced control of the airplane.

**(f) Compliance**

(1) Comply with this AD within the compliance times specified, unless already done.

(2) Within 55 flight hours after the effective date of this AD:

(i) Replace the clutch with a dual mass flywheel. Use Technify Motors Service Bulletin (SB) No. SB TMG 125-1020 P1, Initial Issue, dated January 27, 2016, to do the replacement.

(ii) Install a start phase monitoring system and software mapping in accordance with the requirements of FAA AD 2015-21-01 (80 FR 64314, October 23, 2015); and

(iii) Inspect the rear radial shaft sealing ring on the gearbox for oil leakage in accordance with Figures 2 and 3 of Technify Motors SB No. SB TMG 125-1020 P1, Initial Issue, dated January 27, 2016. If an oil leak is detected, replace the gearbox with a part eligible for installation before the next flight.

**(g) Installation Prohibition**

After the effective date of this AD:

(1) Do not install an engine that is equipped with a clutch and has an affected gearbox listed in Figure 1 to paragraph (c) of this AD;

(2) Do not install an affected gearbox on an engine unless it has passed the inspection required by paragraph (f)(2)(iii) of this AD; and

(3) Do not install a clutch on an engine previously modified in accordance with the requirements of paragraph (f)(2) of this AD or already incorporating a dual mass flywheel.

**(h) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(i) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2017-0034, dated February 20, 2017, for more information. You may examine the MCAI in the AD docket



on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0241.

(3) Technify Motors GmbH Service Bulletin SB No. SB TMG 125-1020 P1, Initial Issue, dated January 27, 2016, can be obtained from Technify Motors GmbH using the contact information in paragraph (i)(4) of this AD.

(4) For service information identified in this proposed AD, contact Technify Motors GmbH, Platanenstrasse 14, D-09356 Sankt Egidien, Germany; phone: +49 37204 696 0; fax: +49 37204 696 29125; email: [info@centurion-engines.com](mailto:info@centurion-engines.com).

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on April 28, 2017.

Robert J. Ganley,  
Acting Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2017-09040 Filed: 5/4/2017 8:45 am; Publication Date: 5/5/2017]